ADDENDUM NUMBER #2

Page 1 of 1

Date: June 20, 2024

PROJECT BIDS DUE

Village of Bellaire

June 24, 2024 Date: CWSRF Project #5910-01 Time: 9:00 AM

WWTP Improvements GFA Project No: 24024

Location: Village of Bellaire

> 202 N Bridge St., Bellaire, MI 49615

The Addendum is issued prior to the receipt of bid proposals to amend the Contract Documents as follows. Bidders shall acknowledge receipt of this addendum by means of acknowledging on Page 1 of the Bid Form (EJCDC C-410).

CLARIFICATIONS

- 1. Headworks water service line to be installed by owner up to general vicinity of headworks building, items to be included in Site Water Service line item are detailed in specification 01270 Section 1.04 Headworks Building Item No. 6.
- 2. Material testing is provided by owner.

BIDDING DOCUMENTS

- 1. EJCD C-410 shall be stricken in its' entirety and replaced with the attached. The bid form has been updated to include line items for Monitoring Well Temporary Access Road alternatives, line item for Top of Berm Restoration, and modifications to quantity of Clay Repairs line item related to the lagoon.
- 2. Specification 01270 shall be stricken in its' entirety and replaced with the attached. Measurement and Payment items have been updated to reflect Bid Form updates.
- 3. Specification 11330 Section 2.4 B.3. shall be stricken and the following added to supersede.
 - Single Level/Speed Control: When the level switch trips, the rake runs. 3. When the level switch returns to the normal position, an off-delay timer is initiated to prevent intermittent equipment starting/stopping. Cycle timing logic shall also be included that shall function in parallel with the level control for optimal rake run time.
 - i. (1) Radar Level Transmitter (primary). Transmitter shall be installed upstream of the rake, at least 1 foot above the highest anticipated water elevation and the beam angle shall not have obstructions between the transmitter face and the water surface. The transmitter shall be capable of being configured with one level set points.

- ii. (1) Mechanical Float Switch (backup) including 50 feet long cabling.
- 4. Specification 15220 Section 2.03 A. 1. Shall be stricken and the following added to supersede.

Stainless Steel, 304 Grade. Pipe shall meet the requirements of ASTM A240. Joint construction shall be flanged with EPDM high temperature gaskets. Joints constructed of flange couplings and fittings shall meet the requirements of ASTM A403

5. Specification 15220 Section 2.03 B. 1. Shall be stricken and the following added to supersede.

Carbon Steel, A53 Black Pipe, or Unlined Ductile Iron. Pipe shall meet the requirements of ASTM A53, Schedule 40, exterior coated with Macropoxy 646, and Acronlon 218. Joint construction shall be welded. Joints constructed of welded couplings and fittings shall meet the requirements of ASTM A865.

6. Specification 15220 Section 2.04 A. 1. Shall be stricken and the following added to supersede.

Stainless Steel, 304 Grade, Full Port Ball Valve. Valve shall meet the requirements of ASTM A351. Joint construction shall be flanged. Joints constructed of flange couplings and fittings shall meet the requirements of ASTM A865

DRAWINGS:

- 1. Sheet C2.3 has been updated and incorporated into this addendum and shall supersede the previous sheets. Updates include modifications to Clay Repair quantities and addition of Top of Berm Repair for clarification. Quantity of Clay Repairs line item includes entire hatched area, bidder to base extents of repairs off of Existing Berm Cross Section detail on sheet C3.2 and bidder to make assumptions to what the extent of repairs and restoration is pertinent to their trade.
- Sheet C2.5 has been updated and incorporated into this addendum and shall supersede the previous sheets. Updates include clarifications to Temporary Access Road detail.
- Sheets E1.1 has been updated and incorporated into this Addendum and shall supersede the previous sheets. Headworks Building influent channel instrumentation updates to include radar level transmitter and mechanical float switch as backup control.

This Addendum No. 2 becomes part of the Contract Documents as of this date and supersedes the information in the originally issued Contract Documents where applicable. The Contractor shall acknowledge receipt of the Addendum in the Bid Schedule included with his/her bid.

BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: Village of Bellaire, 202 N. Bridge St, PO Box 557, Bellaire, MI 49615
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - F. Required Bidder Qualification Statement with supporting data; and
 - G. C-451 Bidders Experience Form
 - H. Certification Regarding Debarment, Suspension, & Other Responsibility Matters
 - I. Davis-Bacon Compliance Certification
 - J. Good Faith Efforts Worksheet

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

- 3.01 Deleted
- 3.02 Unit Price Bids
 - A. Bidder will perform the following Work at the indicated unit prices:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
SITE IN	MPROVEMENTS			•	•
1	Mobilization, Max 5%	LS	1	\$	\$
2	Asphalt Road/Driveway Removal	SF	2,800	\$	\$
3	Access Drive Replacement	SY	450	\$	\$
4	Existing Sanitary Sewer Removal		20		
4	including Bulkhead	LF	30	\$	\$
5	Sewer Manhole, 4' Dia.	EA	1	\$	\$
6	Sanitary Sewer, 10" SDR 35	LF	60	\$	\$
7	2" PVC Monitoring Wells	EA	5	\$	\$
8	ALTERNATIVE A - Temporary Access	SF	22,000	\$	\$
0	Drive, Gravel				۲
9	ALTERNATIVE B - Temporary Access Drive, Portable/Mobile Mats	LF	1,800	\$	\$
10	Removal of Diversion Structure	LS	1	\$	\$
11	Connect to Existing Sanitary Sewer	EA	3	\$	\$
12	Proposed Diversion Structure	LS	1	\$	\$
13	Site Restoration	LS	1	\$	\$
LAGO	ON BERM REPAIRS				
1	Clay Repairs	SF	13,000	\$	\$
2	Geotextile Fabric & Erosion Control Gravel	SF	15,000	\$	\$
3	Berm Soil Testing	EA	4	\$	\$
4	Top of Berm Repairs	SF	6,000	\$	\$
BIOSO	LIDS REMOVAL				
	Removal, Hauling, Land Application &		5 000 000	_	
1	Agronomic Management of Biosolids	GAL	5,300,000	\$	\$
2	Biosolids Testing & Analysis	EA	4	\$	\$
3	Temporary Heavy Equipment Access Pad	SYD	230	\$	\$
HEAD\	WORKS BUILDING				
1	Headworks Building including Lean To	SF	450	\$	\$
	Mechanical In-Channel Screen including				
2	Washer/ Compactor Unit and Waste	LS	1	\$	\$
	Chute				
3	Manual Bar Screen	LS	1	\$	\$
4	Site Electrical Demolition and New Service	LS	1	\$	\$
5	Site Natural Gas	LS	1	\$	\$
6	Site Water Service	LS	1	\$	\$
7	Aluminum Grating	SF	20	\$	\$
8	Concrete Headworks Channel and Bypass	LS	1	\$	\$
9	Hydraulic Slide Gates	EA	4	\$	\$
10	Gas Detection System	LS	1	\$	\$
11	Building Mechanical / HVAC	LS	1	\$	\$
12	Building Lighting and Electrical	LS	1	\$	\$
13	Building Plumbing	LS	1	\$	\$
AERAT	ION SYSTEM REPLACEMENT				
1	Lagoon Aeration Equipment including Blowers	LS	1	\$	\$

2	Aeration Header Piping, Valves and Appurtenances	LS	1	\$	\$
3	Aeration riser piping and appurtenances	LS	1	\$	\$
4	Blower Electrical	LS	1	\$	\$
Total	\$				

B. Bidder acknowledges that:

- 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
- 2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—DELETED

ARTICLE 5—DELETED

ARTICLE 6—TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of days indicated in the Agreement.
- 6.02 **Deleted**
- 6.03 **Deleted**
- 6.04 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 7.01 Bid Acceptance Period
 - A. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 7.02 Instructions to Bidders
 - A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 7.03 Receipt of Addenda

Bidder hereby acknowledges receipt of the following Addenda:

Bidders are responsible to research Addendums and Acknowledge Addendums on the Bid form. Addendums will be posted, at least three (3) days prior to Bid Opening, on the GFA website at www.gfa.tc, go into the Project Center, Advertisements for Bids, then select the appropriate Project. Failure of any Bidder to obtain any such addendum or interpretation shall not relieve such Bidder from any obligation under his Bids as submitted. All Addendas, so issued, shall become part of the Contract Documents.

Addendum Number	Addendum Date

ARTICLE 8—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

8.01 Bidder's Representations

- A. In submitting this Bid, Bidder represents the following:
 - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - 8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - 9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

- 10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

8.02 Bidder's Certifications

- A. The Bidder certifies the following:
 - 1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
 - 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
 - 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
 - 4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

Bidder:	its this Bid as set forth above:
	(typed or printed name of organization)
Ву:	(individual's signature)
Name:	(
	(typed or printed)
Title:	(typed or printed)
Date:	
	(typed or printed)
If Bidder is a corporati	on, a partnership, or a joint venture, attach evidence of authority to sign.
Attest:	
Name:	(individual's signature)
	(typed or printed)
Title:	
Dato	(typed or printed)
Date:	(typed or printed)
Address for giving no	otices:
Bidder's Contact:	
Name:	
	(typed or printed)
Title:	(typed or printed)
Phone:	(cyped of printed)
Email:	
Address:	
Ridder's Contractor	License No.: (if applicable)

SECTION 01270 - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Bid price includes all labor, tools, equipment, materials, transportation, testing, permits and applicable fees, and all accessories and related work not paid for separately in order to complete the installation according to the plans and specifications.
- B. All measurement and payment will be based on completed work, ready for use, performed in strict accordance with the Plans and Specifications.
- C. Owner reserves the right to delete and / or adjust any line item or quantity on the BID FORM.
- D. All work shall conform to all applicable OSHA standards.
- E. Owner reserves the right to delete divisions from this contract.

1.02 APPLICATION FOR PAYMENT

- A. Pay period: Begins on the 1st of the month and continues through the end of the following month. Contractor shall submit payment application on the 25th of the following month.
- B. Payment requests shall be submitted on the forms included in the Bid Documents.

1.04 PAY ITEM DESCRIPTIONS

Site Improvements

- 1. **Mobilization, Max 5%:** The completed work for mobilization will be paid for at the contract lump sum (LS) price. This payment shall be payment in full for equipment and material delivery, transportation and storage, bonds, insurances, permits and fees, all coordination with the Village, Engineers, Regulatory Agencies, utility companies and all other labor and materials.
- 2. **Asphalt Road / Driveway Removal:** The completed work for asphalt road / driveway removal shall be paid for at the contract unit price by the square foot (SF) based on the actual quantity removed, as indicted in the standard details, over the entire as shown on the plans. This unit price shall include, but not be limited to, subbase, aggregate base, bituminous or concrete surfacing removed and all other labor, materials and equipment necessary to complete the work according to the plans and specifications. Any bituminous or gravel damage outside the limits will be repaired/replaced. This cost shall be included in the cost of the project.
- 3. Access Drive Replacement: The completed work for gravel road / driveway replacement shall be paid for at the contract unit price by the square yard (SY) based on the actual quantity constructed, as indicted in the standard details, over the entire as shown on the plans. This unit price shall include, but not be limited to, subbase, aggregate base, aggregate surfacing and all other labor, density, materials and equipment necessary to

complete the work according to the plans and specifications. Any bituminous/gravel damage outside the limits will be repaired/replaced. This cost shall be included in the cost of the project. Costs for gravel driveway repair and replacement beyond limits defined on plans are incidental and to be included with the cost of the project.

- 4. Existing Sanitary Sewer Removal, Including Bulkhead: The completed work for demolishing and removing the existing sanitary sewer shall be paid for at the contract unit price per linear foot (LF). This payment shall include, but not be limited to, all excavation, dewatering, backfilling, stone bedding, density of backfilled materials, labor, equipment, furnishing all materials, accessories and all related items not paid for separately necessary to complete the removal according to the plans and approved methods.
- 5. **Sewer Manhole, 4' Dia.:** The completed work for doghouse manhole, 4' diameter will be paid for at the contract unit price each (EA). Payment shall be based on the actual number of manholes, which includes materials shown in plans in detail for manholes. The unit price shall include, but not be limited to, all excavation, dewatering, bypass pumping, backfilling, stone bedding, density of backfilled materials, manhole frame and cover, waterstop, construction of flow channel, plastic flow lines, pipe connections, Kor-N-Seal, waterproofing, traffic control, labor, equipment, accessories and all related items not paid for separately necessary to complete the installation according to the plans and specifications.
- 6. Sanitary Sewer, 10", SDR 35: The completed work for sanitary sewer, 8" and 10" SDR 35 installation and testing, of the sizes as shown on the plans and specifications, will be paid for at the contract unit price linear foot (LF). Payment shall be based on the horizontal field measurements from the point of beginning to the point where the new sanitary sewer ends, or from termination point to termination point. In addition, payment shall also include, but not be limited to, all excavation, clearing and grubbing, dewatering, bypass pumping, temporary and permanent soil erosion control, stone bedding, backfilling, density, connection to proposed manholes, fittings, tree removal, bypass pumping, traffic control, signage, all gravel road and shoulder repairs / replacement, as required by the Village of Bellaire, pressure testing, labor, equipment, furnishing materials, and all accessories and related work not paid for separately in order to complete the installation according to the plans and specifications.
- 7. 2" PVC Monitoring Wells: The completed work for 2" PVC monitoring wells shall be paid for at the contract unit price per each (EA). The price shall include all equipment, labor, transportation, and associated fees and related work not paid for separately in order to complete the installation of the required monitoring wells in accordance with EGLE standards and requirements. This payment shall include, but is not limited to drilling, well casing, filter pack, grout, well cap, lock, clearing and grubbing, site access, restoration, permits, fees, and all other labor, materials, or equipment required to complete the work in accordance with the plans and specifications.
- 8. Alternative A Temporary Access Drive, Gravel: The completed work for temporary access road shall be paid for at the contract unit price by the square feet (SF) based on the actual quantity constructed, as indicted in the standard detail provided on Sheet C2.5, over the entire as shown on the plans. This unit price shall include, but not be limited to, subbase, aggregate base, aggregate surfacing and all other labor, density, clearing and grubbing, materials and equipment necessary to complete the work according to the plans and specifications.

- 9. Alternative B Temporary Access Drive, Portable/Mobile Mats: The completed work for temporary access road shall be paid for at the contract unit price by the linear feet (LF) based on the actual quantity constructed, as indicted and shown on Sheet C2.5. This unit price shall include, but not be limited to, installation of portable/movable mats capable to accommodate weight of drill rig, including all labor, density, clearing and grubbing, materials and equipment necessary to complete the work according to the plans and specifications.
- 10. Removal of Existing Diversion Structure: The completed work for demolition of existing inlet channel will be paid for at the contract lump sum (LS) price. This payment shall include all work for removal of existing structure and appurtenances including but not limited to all excavation, dewatering, backfilling, stone bedding, density of backfilled materials, labor, equipment, furnishing all materials, accessories and all related items not paid for separately necessary to complete the installation according to the plans and approved methods.
- 11. Connect to Existing Sanitary Sewer: The completed work for the connection to the existing sanitary sewer will be paid for at the contract unit price each (EA), as quoted in the Bid and according to the plans and specifications. Payment shall be based on the actual number of connections made. The unit price shall include, but not be limited to, all connection to inlet diversion structure and existing manhole, construction of flow channel, waterstop, Kore-N-Seal boot, additional pipe, fittings and transitions, field investigation, concrete, excavation, dewatering, gravel shoulder, backfilling, stone bedding, density of backfilled materials, labor, equipment, traffic control, accessories and all related items, not paid for separately, necessary to complete the installation according to the plans and specifications.
- 12. **Proposed Diversion Structure:** The completed work for inlet diversion structure will be paid for at the contract lump sum (LS) price. This payment shall include all work for construction of the inlet diversion structure and includes but is not limited to all structural concrete, forming, structural rebar, anchors, ties, water seals, grout, backfilling, stone bedding, density of backfilled materials, hydraulic slide gates, aluminum grating, labor, equipment, traffic control, accessories and all related items, not paid for separately, necessary to complete the installation according to the plans and specifications.
- 13. **Site Restoration:** The completed work for site restoration & cleanup shall be paid for at the contract lump sum (LS) price. This payment shall be payment in full for restoration to damaged site due to project including but not limited to, topsoil, raking and seed bed preparation, providing seed, fertilize, mulch and mulch blanket, repair and/or replacement of lagoon embankments (not identified for repair refer to Lagoon Repair Bid Item No. 1 & 2), process piping, lagoon aeration equipment, driveway, berms damaged during project and any other labor or equipment necessary to complete the work as per the plans and specifications. All soil erosion controls not covered in other items. If winter seeding is necessary, spring seeding will be required and included in the cost of this item. This cost also includes removal and replacement of existing ground cover that may be damaged or disturbed during installation.

Lagoon Berm Repairs

1. Clay Repairs: The completed work for clay repairs shall be paid for at the contract unit price by the square foot (SF) on the basis of the actual quantity constructed, as indicated in

the standard details, over the entire as shown on the plans. This unit price shall include, but not be limited to, clay material, compaction, density, testing, and any other labor, materials and equipment necessary to complete the work according to the plans and specifications. Any clay liner damaged outside the limits will be repaired/replaced. This cost shall be included in the cost of the project. Costs for clay repair and replacement beyond limits defined on plans are incidental and to be included in the cost of the project.

- 2. **Geotextile Fabric & Erosion Control Gravel:** The completed work for geotextile fabric shall be paid for at the contract unit price by the square foot (SF) on the basis of the actual quantity constructed, as indicated in the standard details, over the entire as shown on the plans. This unit price shall include, but not be limited to, geotextile fabric, anchoring, gravel, erosion control, placement, and all other labor, materials and equipment required to complete the work in accordance with the plans and specifications.
- 3. **Berm Soil Testing:** The completed work for site berm soil testing will be paid for at the contract unit price each (EA). This payment shall be payment in full for berm soil testing including but not limited to, sampling and analysis, transportation, and all other labor, materials and equipment required to complete the work in accordance with the plans and specifications.
- 4. **Top of Berm Repairs:** The completed work for top of berm repairs shall be paid for at the contract unit price by the square foot (SF) on the basis of the actual quantity repaired, as indicated in the standard details, over the entire as shown on the plans. This unit price shall include, but not be limited to, subbase, aggregate base, aggregate surfacing, compaction, density, testing, and any other labor, materials and equipment necessary to complete the work according to the plans and specifications. Any berm damaged outside the limits will be repaired/replaced. This cost shall be included in the cost of the project. **Costs for top of berm repair and replacement beyond limits defined on plans are incidental and to be included in the cost of the project.**

Biosolids Removal

- 1. Removal, Hauling, Land Application & Agronomic Management of Biosolids: The completed work for the management of biosolids shall be paid for at the contract unit price per gallon (GAL), as quoted in the Bid and according to the plans and specifications. The price shall include all equipment, labor, permits and associated fees and related work not paid for separately in order to remove, transport, and dispose of biosolids compliant with the plans and specifications and as directed by the Owner. The contractor is responsible to keep records and provide to Owner volumes of biosolids removed. The Owner reserves the right to limit and/or discontinue operation of volume of biosolids to be removed.
- 2. **Biosolids Testing & Analysis:** The completed work for the testing and analysis of biosolids shall be paid for at the contract unit price per each (EA). The per sample price shall include all equipment, labor, transportation, and associated fees and related work not paid for separately in order to sample, transport, and analyze biosolids compliant with the plans and specifications and as directed by the Owner. *The contractor is responsible to keep records and provide to Owner quantities and analytical results.*
- 3. **Temporary Heavy Equipment Access Pad:** The completed work for heavy equipment access pad shall be paid for at the contract unit price by the square yard (SYD) on the basis

of the actual quantity installed, as indicated on the plans. This unit price shall include, but not be limited to, backfilling, stone bedding, density of backfilled materials, labor, equipment, traffic control, restoration (as applicable), accessories and all related items, not paid for separately, necessary to complete the installation according to the plans and specifications.

Headworks Building

- 1. Headworks Building, Including Lean-to: The complete work for the headworks building shall be paid for at a contract unit price per square foot (SF). Payment shall be based on the actual quantity constructed. The unit price shall include, but not limited to all earthwork, materials, labor, equipment, furnishing materials, accessories, and all related items not paid for separately necessary to complete the work according to the plans and specifications. Scope of work includes masonry, concrete flatwork, equipment pads, treated lumber posts, doors, foundation, roof, painting, bollards, trusses, concrete pads, floor drains, and all other equipment, materials and labor required to complete the work in accordance with the plans and specifications. Headworks building rated for NEMA Classification 1 Division 1 and all materials must meet requirements.
- 2. Mechanical In-Channel Screen, Including Washer/Compactor Unit & Waste Chute: The completed work for mechanical in-channel screen will be paid for at the contract lump sum (LS) price. This payment shall include but is not limited to equipment, anchoring, freight, manufacturer coordination and training, testing, appurtenances, water service connection, mounting/integrating washer compactor unit, discharge chute, endless bagger, waste disposal bag, sch 40 PVC drain piping, spare equipment, and any other labor, materials and equipment required to install the screen according to manufacturer's recommendations, project plans and specifications.
- 3. **Manual Bar Screen:** The completed work for manual bar screen will be paid for at the contract lump sum (LS) price. This payment shall include but is not limited to equipment, anchoring, freight, testing, appurtenances, and any other labor, materials and equipment required to install the screen according to manufacturer's recommendations, project plans and specifications.
- 4. **Site Electrical Demolition and New Service:** The complete work for site electrical shall be paid for at the contract lump sum (LS) price. This payment shall include but not limited to, wiring, conduit, junction box, removal of existing site electrical as called to be demolished on plans, permits, fees, all new service line and conduit as shown on proposed site plan to service Headworks Building and blowers, and all associated labor, equipment and materials not paid for separately necessary to complete the work according with the plans and approved methods.
- 5. **Site Natural Gas Service:** The completed work for natural gas service shall be paid for on a lump sum (LS) basis as quoted in the Bid and shall include all work necessary as shown on the plans and called for in the specifications. This payment shall include, but is not limited to, installation of any required piping, valves, fittings, and any other related labor, materials or equipment required to complete the work as specified to connect existing gas line provided by the Village into the Headworks Building.
- 6. Site Water Service: The completed work for headworks building water service will be

paid for at the contract lump sum (LS) price. This payment shall include all work required to bring the existing water service line provided by the Village into the Headworks Building and connect to all fixtures and any other labor, materials, and equipment required to complete the work in accordance with the plans and specifications.

- 7. **Aluminum Grating:** The completed work for aluminum grating shall be paid for at the contract unit price by the square foot (SF) on the basis of the actual quantity installed within the Headworks Building, as indicated on the plans. This unit price shall include, but not be limited to, grating, anchoring, supports, and any other labor, materials and equipment required to complete the work in accordance with the plans and specifications.
- 8. Concrete Headworks Channel and Bypass: The completed work for concrete headworks channel will be paid for at the contract lump sum (LS) price. This payment shall include all work for construction of the mechanical screen and bypass channels and includes but is not limited to all structural concrete, forming, structural rebar, anchors, ties, water seals, grout, backfilling, stone bedding, density of backfilled materials, labor, equipment, traffic control, accessories and all related items, not paid for separately, necessary to complete the installation according to the plans and specifications.
- 9. **Hydraulic Slide Gates:** The completed work for hydraulic slide gates will be paid for at the contract unit price each (EA), as quoted in the Bid and according to the plans and specifications. Payment shall be based on the actual number of gates installed within the Headworks Building. The unit price shall include, but not be limited to, aluminum slide gate, handle, embedded guide frame, seals, and any other labor, materials, and equipment required to complete the work in accordance with the plans and specifications.
- 10. Gas Detection System: : The completed work for manual bar screen will be paid for at the contract lump sum (LS) price. This payment shall include but is not limited to, mobilization, transportation, installation of electrical, wiring, conduit, control panel, sensors hardware, supports, appurtenances, and any other labor, materials, or equipment required to install the gas detection system according to manufacturer's recommendations and in accordance with the plans and specifications.
- 11. **Building Mechanical / HVAC:** The complete work for building mechanical / HVAC shall be paid for on a lump sum basis (LS) and shall include all mechanical and HVAC work as shown in drawings and called for in specifications. Included, but not limited to supply and installation of proposed equipment including make-up air units, supply air registers, isolation dampers, natural gas regulator, testing, permits, fees, louvers, exhaust fans, concrete equipment pads, support rails, duct work, etc. and all other proposed equipment and labor necessary to complete the headworks building mechanical improvements.
- 12. **Building Lighting and Electrical:** The complete work for building lighting and electrical shall be paid for on a lump sum basis (LS) and shall include all electrical and lighting work as shown in drawings and called for in specifications. Included, but not limited to supply and installation of proposed equipment including control panels, installation of manufacturer control panels, local control panels, wiring, conduit, relays, raceways, junction boxes, testing, permits, fees, interior/exterior lighting, support rails, etc. and all other proposed equipment and labor necessary to complete the headworks building site electrical improvements.
- 13. **Building Plumbing:** The complete work for building plumbing shall be paid for on a lump

sum basis (LS) and shall include all plumbing work as shown in drawings and called for in specifications. Included, but not limited to piping, valves, eye wash station, hose bibs, fittings, appurtenances, and all other materials, equipment and labor necessary to complete the work according to the plans and specifications.

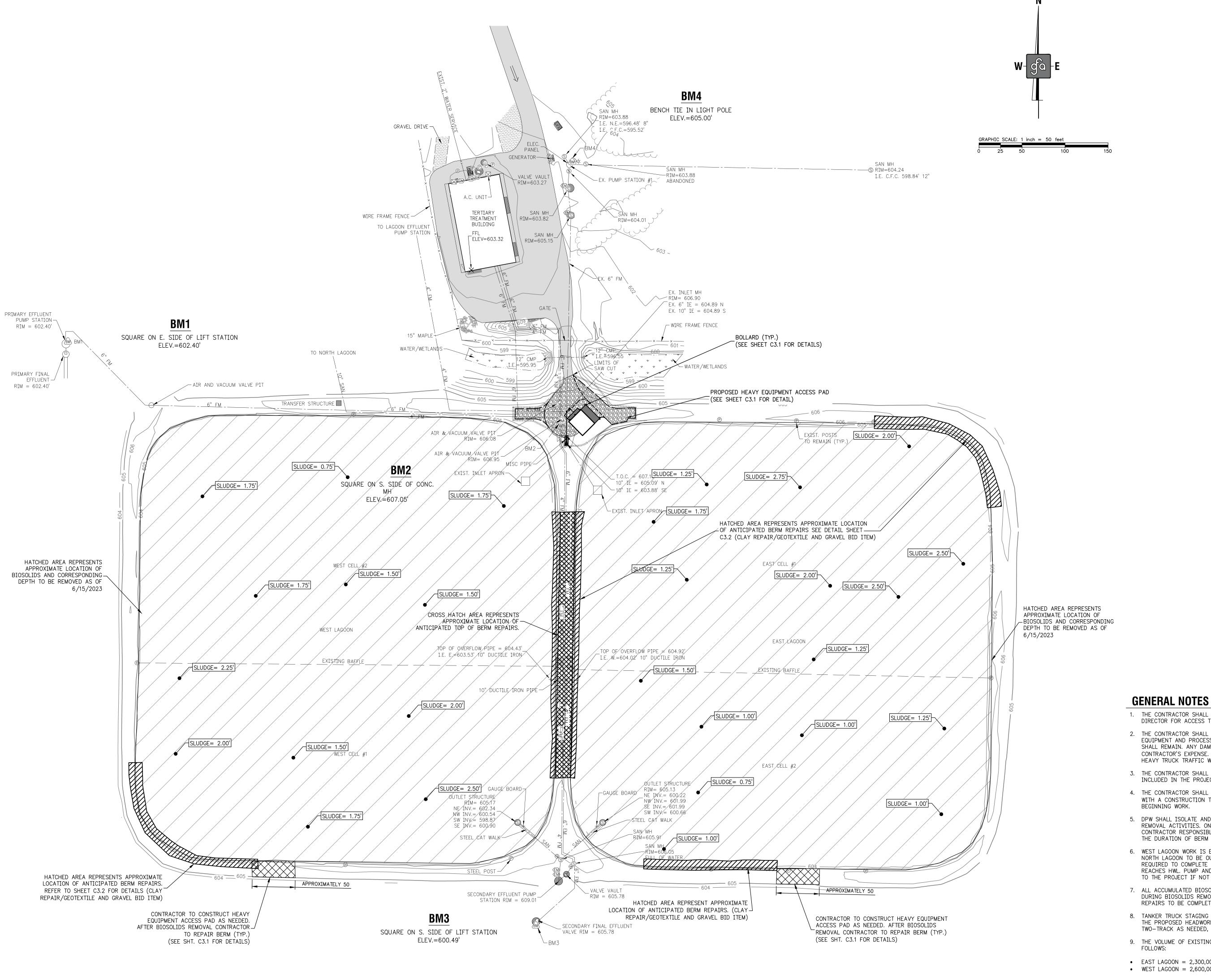
Aeration System Replacement

- 1. Lagoon Aeration Equipment: The complete work for lagoon aeration equipment shall be paid for on a lump sum basis (LS) and shall include all equipment required to provide a complete aeration system as manufactured by Triplepoint. Included, but not limited to, Ares aeration units, spare diffusers, fittings, hose clamps, flexible tubing, full port ball valves and fittings, aeration manifolds, duty and backup positive displacement blowers, concrete equipment pad, blower variable frequency drives (VFDs), controls, wiring, conduit, relays, junction boxes, etc., start-up services, and all other labor, materials and equipment required to complete the installation of a complete aeration system in accordance with the plans and specifications.
- 2. Aeration Header Piping, All Types & Sizes: The complete work for aeration header piping shall be paid for on a lump sum basis (LS) and shall include all materials and equipment required to provide header piping to the complete aeration system. Included, but not limited to, coated galvanized steel header piping, HDPE header piping of all sizes, riser piping, fittings, bends, tees, transitions, excavations, backfilling, density of backfilled materials, stone bedding, steel conduit/casing, field investigations, accessories and all labor, materials and equipment related to the installation of header piping not paid for separately, necessary to complete the work according to plans and specifications.
- 3. **Aeration Piping Valves and Appurtenances:** The complete work for aeration piping valves and appurtenances shall be paid for on a lump sum basis (LS) and shall include all materials and equipment related to aeration piping valves and appurtenances not paid for separately, necessary to complete the work in accordance with the plans and specifications. Included, but not limited to, plastic valves of all sizes, purge valves, fittings, transitions, excavations, backfilling, density of backfilled materials, stone bedding, accessories and all other labor, materials and equipment to complete the work according to plans and specifications.
- 4. **Blower Electrical:** The complete work for blower electrical shall be paid for on a lump sum basis (LS) and shall include all electrical work for the blowers as shown in drawings and called for in specifications. Included, but not limited to supply and installation of proposed equipment including control panels, local control panels, wiring, conduit, relays, raceways, junction boxes, testing, permits, fees, support rails, etc. and all other proposed equipment and labor necessary to complete the blower electrical improvements.

PART 2 – PRODUCTS Not used

PART 3 – EXECUTION Not used

END OF SECTION 01270



) http://gfa.tc) 231.946.5874 (p)) 231.946.3703 (f)

5

ESTING & OPERATIONS
123 West Front Street
Traverse City, MI 49684

TESTIN 12:

 REV#
 DATE
 DRN

 A
 02/18/2024
 CPB
 ISSUED FOR E.G.L.E. REVIEW

 B
 4/18/2024
 AMB
 ISSUED FOR EGLE PERMITS

 0
 5/24/2024
 AMB
 ISSUED FOR BIDS

 1
 6/20/2024
 AMB
 ADDENDUM #2

VILLAGE OF BELLAIRE

TREATMENT PLANT IMPROVEMENTS
S REMOVAL AND BERM REPAIR PLAN
SECTION 30, T.30 N., R.7 W.
F OF BELLAIRE, ANTRIM COUNTY, MICHIGAN

THE CONTRACTOR SHALL COORDINATE WITH THE WWTP OPERATOR AND DPW DIRECTOR FOR ACCESS TO THE LAGOONS FOR BIOSOLIDS REMOVAL.

- 2. THE CONTRACTOR SHALL USE CARE TO PROTECT THE EXISTING LAGOONS, EQUIPMENT AND PROCESS PIPING THAT IS NOT PROPOSED TO BE REMOVED AND SHALL REMAIN. ANY DAMAGE SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE. EXISTING PAVING IS IN FAIR CONDITION, ASSUME HEAVY TRUCK TRAFFIC WILL CAUSE DAMAGE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE RESTORATION WITH COST INCLUDED IN THE PROJECT.
- 4. THE CONTRACTOR SHALL PROVIDE THE WWTP OPERATOR AND DPW DIRECTOR WITH A CONSTRUCTION TIMELINE/SCHEDULE FOR APPROVAL PRIOR TO BEGINNING WORK.
- 5. DPW SHALL ISOLATE AND DRAIN THE LAGOONS PRIOR TO LAGOON BIOSOLIDS REMOVAL ACTIVITIES. ONLY ONE LAGOON MAY BE OUT OF SERVICE AT A TIME. CONTRACTOR RESPONSIBLE FOR MAINTAINING DRY WORKING CONDITIONS FOR THE DURATION OF BERM MAINTENANCE FOLLOWING BIOSOLIDS REMOVAL.
- 6. WEST LAGOON WORK IS EXTREMELY TIME SENSITIVE DUE TO THE NEED FOR NORTH LAGOON TO BE OUT OF SERVICE DURING THIS TIME. CONTRACTOR IS REQUIRED TO COMPLETE ALL WORK IN WEST LAGOON PRIOR TO EAST LAGOON REACHES HWL. PUMP AND HAUL WILL BE REQUIRED AT NO ADDITIONAL COST TO THE PROJECT IF NOT COMPLETED IN TIME.
- 7. ALL ACCUMULATED BIOSOLIDS ARE TO BE SCRAPED OFF ALL EXISTING BERMS DURING BIOSOLIDS REMOVAL FOR BERM INSPECTION AND MAINTENANCE REPAIRS TO BE COMPLETED BY CONTRACTOR.
- 8. TANKER TRUCK STAGING SHALL UTILIZE THE PROPOSED ACCESS PAD EAST OF THE PROPOSED HEADWORKS BUILDING. CONTRACTOR MAY UTILIZE EXISTING TWO—TRACK AS NEEDED, BUT IS TO USE CARE TO NOT FURTHER DAMAGE BERM.
- 9. THE VOLUME OF EXISTING BIOSOLIDS IN THE LAGOONS IS APPROXIMATE AS FOLLOWS:
- EAST LAGOON = 2,300,000 GALLONS (AVG. 1.5' DEPTH)
 WEST LAGOON = 2,600,000 GALLONS (AVG. 1.75' DEPTH)

P.M.:

JENNIFER GRAHAM, P.E.

DR:

CKD::

C. BALLANCE

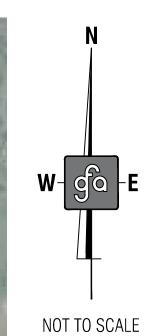
A. BELANGER

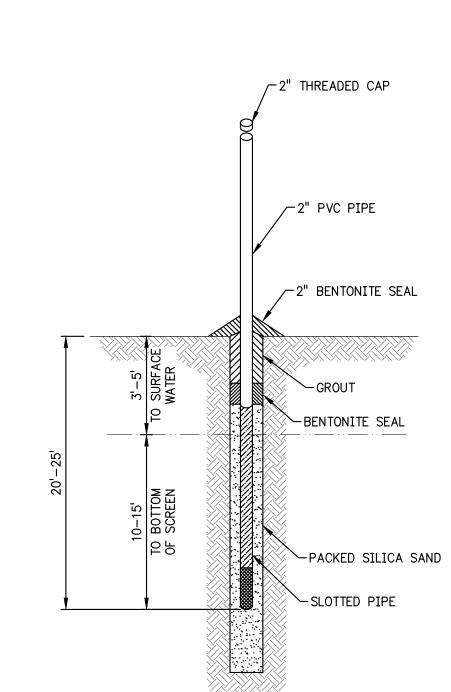
JOB NO.:

WATER T BIOSOLIDS

24024



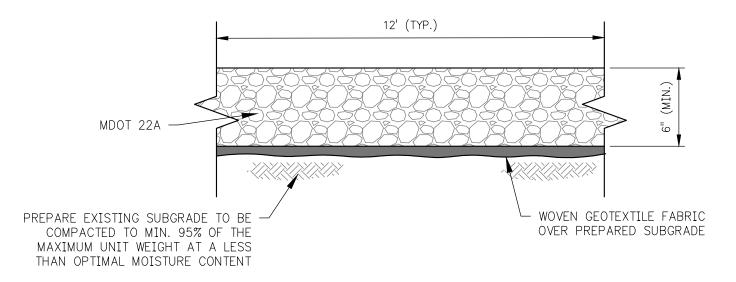




MONITORING WELL DETAIL SCALE: NOT TO SCALE

GENERAL NOTES

- 1. LOCATIONS ARE APPROXIMATE AND CONTRACTOR TO FINALIZE WITH ENGINEER PRIOR TO IMPLEMENTING WORK.
- 2. REFER TO TECHNICAL SPECIFICATIONS.
- 3. CONTRACTOR IS RESPONSIBLE FOR ALL MOBILIZATION, SITE ACCESS, INCLUDING CLEANING, GRAVEL PAD, TEMPORARY WATER/POWER SUPPLY.
- 4. CONTINUOUS SOIL SAMPLING MAY BE REQUIRED PER REGULATORY REQUIREMENTS.
- 5. ALL MONITORING WELL SCREENS ARE TO BE PLACED SUCH THAT THE TOP OF THE WELL SCREEN IS A MINIMUM OF 5—10 FEET BELOW THE WATER TABLE.
- GROUNDWATER SURFACE AND TOP OF WELL CASING ELEVATIONS ARE REQUIRED WITHIN 0.01 FOOT AT TIME OF INSTALLATION, FOR EACH WELL. USGS DATUM TO BE USED.
- 7. MONITORING WELL AND TEMPORARY ACCESS ROAD AREA LOCATED WITHIN REGULATED WETLAND. CONTRACTOR SHOULD ANTICIPATE ORGANIC/WET SOIL CONDITIONS. ALL WORK TO CONFORM TO USACE JOINT PERMIT REQUIREMENTS.
- 8. NO STUMP REMOVAL IS PERMITTED WITHIN REGULATED WETLANDS AND ALL CLEARED/GRUBBED MATERIAL TO REMAIN ON SITE.



NOTE:
CONTRACTOR SHALL REMOVE TOPSOIL PRIOR TO PLACEMENT OF
TEMPORARY DRIVE. TOP 12" OF TOPSOIL REMOVED TO BE
SEPARATED AND SHALL BE PLACED BACK ON ACCESS DRIVE AS
PART OF RESTORATION.

TEMPORARY ACCESS DRIVE (ALTERNATIVE A)

NO SCALE

http://gfa.tc231.946.5874 (p)231.946.3703 (f)

(<u>G</u>

SURVEYING
TESTING & OPERATIONS
123 West Front Street
Traverse City, MI 49684

 1/18/2024
 AMB
 ISSUED FOR BIDS

 3/24/2024
 AMB
 ISSUED FOR BIDS

 5/20/2024
 AMB
 ADDENDUM #1

 5/20/2024
 AMB
 ADDENDUM #2

ATMENT PLANT IMPROVEMENTS
RING WELL SITE PLAN
TION 30, T.30 N., R.7 W.

VILLAGE OF BELLAIRE
WASTE WATER TREATMENT PLANT IN
MONITORING WELL SITE PLA
SECTION 30, T.30 N., R.7 W.

ENNIFER GRAHAM, P.E.
C. BALLANCE CKD:
A. BELANGER
NO:
CARACTERIST CKD:
A. BELANGER

PANEL #PP-H				200 AMPS M.C.B. 480V-3Ø -3W SQUARE D TYPE NF NEMA 4X SURFACE PANEL WITH TRIM KIT, GROUND BAR KIT, COPPER MAINS, AND SOLID NEUTRAL.				
CIR NO.	AMP/ POLES	DESCRIPTION	LOAD	LOAD	DESCRIPTION	AMP/ POLES	CIR NO.	
1					<u>CP-1</u> - <u>M-1</u> , & <u>M-2</u>		2	
3	15/3*	<u>MUA-1</u> - 1.6 MCA	1275	1458	0.25 HP LOW FLOW	15/3*	4	
5					0.5 HP LOW FLOW WASHER COMPACTOR		6	
7	15/2	TX-H - HEADWORKS - 7.5KVA	1838		<u>CP-2</u> - <u>M-3</u> & <u>M-4</u> - BLOWERS 1 & 2		8	
9	13/2	1X-H - HEADWORKS - 7.5KVA	1636	49218	50 HP EACH (BLOWERS DO NOT RUN OR	100/3*	10	
11		SPACE			START SIMULTANEOUSLY)		12	
13		SPACE			SPACE		14	
15		SPACE			SPACE		16	
17		SPACE			SPACE		18	
19		SPACE			SPACE		20	
21		SPACE			SPACE		22	
23		SPACE			SPACE		24	
25		SPACE			SPACE		26	
27		SPACE			SPACE		28	
29		SPACE			SPACE		30	

TOTAL PANEL LOAD = 53,789 W - 64.7 A

(L) DENOTES CIRCUIT REQUIRED TO PASS THRU LIGHTING CONTROL PANEL.

(A) DENOTES ARC FAULT CIRCUIT INTERRUPTER (AFCI) CIRCUIT BREAKER REQUIRED.

G DENOTES GROUND FAULT CIRCUIT INTERRUPTER (GFCI) CIRCUIT BREAKER REQUIRED. S) DENOTES CIRCUIT BREAKER WILL REQUIRE SHUNT-TRIP OR TO BE RUN THROUGH SHUNT-TRIP CONTACTOR.

B) DENOTES BREAKER LOCK REQUIRED ON CIRCUIT BREAKER.

E) DENOTES 30mA GROUND FAULT EQUIPMENT PROTECTION (GFEP) CIRCUIT BREAKER REQUIRED. * DENOTES CONTRACTOR TO CONFIRM EXACT CIRCUIT BREAKER SIZE WITH EQUIPMENT SUBMITTALS.

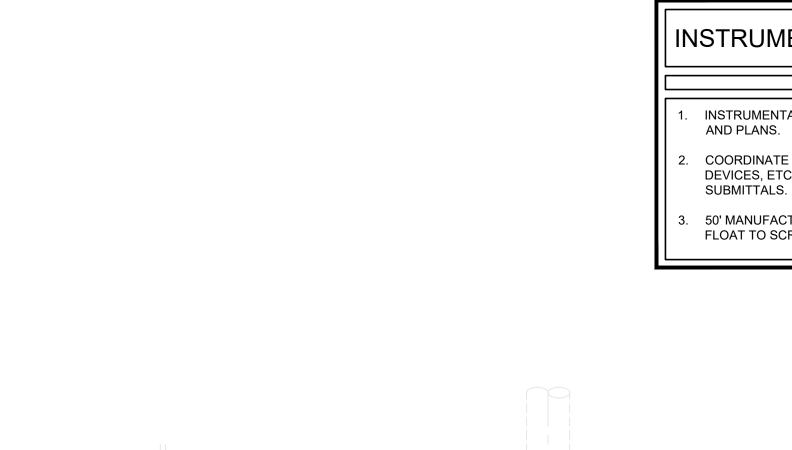
PANEL #LP-H				30 AMPS M.C.B. 120/240V-1Ø -3W SQUARE D TYPE QO NEMA 4X SURFACE PANEL WITH TRIM KIT, GROUND BAR KIT, COPPER MAINS, AND SOLID NEUTRAL.				
CIR NO.	AMP/ POLES	DESCRIPTION	LOAD	LOAD	DESCRIPTION	AMP/ POLES	CIR NO.	
1	20/1	LIGHTS - INTERIOR & EXTERIOR	422	456	<u>EF-1</u>	20/1	2	
3	20/1	RECEPTACLES - EXTERIOR	360		SPARE	20/1	4	
5	20/1	CP-3 - GAS MONITORING CONTROL PANEL	600		SPARE	20/1	6	
7		SPACE			SPARE	20/1	8	
9		SPACE			SPARE	20/1	10	
11		SPACE			SPACE		12	
13		SPACE			SPACE		14	
15		SPACE			SPACE		16	
17		SPACE			SPACE		18	
19		SPACE			SPACE		20	

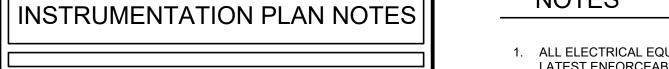
(L) DENOTES CIRCUIT REQUIRED TO PASS THRU LIGHTING CONTROL PANEL. (A) DENOTES ARC FAULT CIRCUIT INTERRUPTER (AFCI) CIRCUIT BREAKER REQUIRED.

G) DENOTES GROUND FAULT CIRCUIT INTERRUPTER (GFCI) CIRCUIT BREAKER REQUIRED.

S) DENOTES CIRCUIT BREAKER WILL REQUIRE SHUNT-TRIP OR TO BE RUN THROUGH SHUNT-TRIP CONTACTOR.

B) DENOTES BREAKER LOCK REQUIRED ON CIRCUIT BREAKER. (E) DENOTES 30mA GROUND FAULT EQUIPMENT PROTECTION (GFEP) CIRCUIT BREAKER REQUIRED.

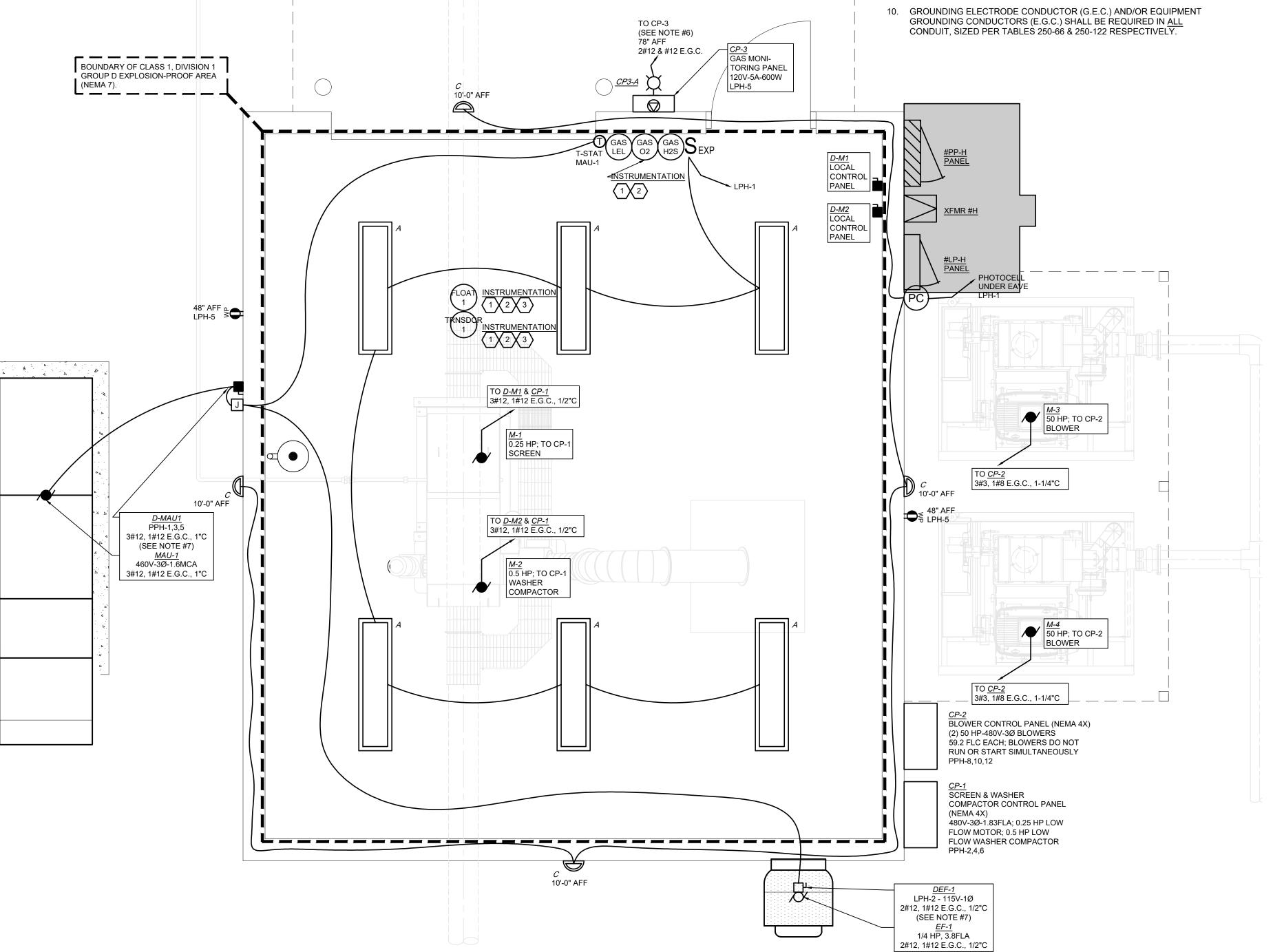




- INSTRUMENTATION AND CONTROL PER SPECIFICATIONS
- 2. COORDINATE LOCATIONS OF PANELS, TRANSMITTING DEVICES, ETC. WITH ENGINEER IN SHOP DRAWING
- 50' MANUFACTURERS CABLE IN 1" CONDUIT TO CONNECT FLOAT TO SCREEN & WASHER CONTROL PANEL (CP-1).

NOTES

- 1. ALL ELECTRICAL EQUIPMENT AND WIRING METHODS SHALL MEET LATEST ENFORCEABLE EDITION OF THE N.E.C. CLASS I, DIVISION 1, GROUP C & D, HAZARDOUS LOCATIONS IN SCREENING ROOM #100.
- 2. ALL ELECTRICAL PIPING IN CLASS I, DIVISION 1, GROUP C & D SHALL BE PVC COATED RIGID CONDUIT, SURFACE MOUNTED. ALL OTHER CONDUIT SHALL BE (GRS) UNLESS NOTED OTHERWISE ON DRAWINGS. USE PVC CONDUIT STRAPS.
- NOT USED
- NOT USED
- NOT USED.
- 6. STROBE WARNING LIGHT (1) SUPPLIED BY CONTROL PANEL MANUFACTURER (CP-3). INSTALLED & WIRED BY E.C.
- 7. T.C.C. SHALL INTERLOCK MAU-1 AND EF-1 TOGETHER THROUGH RELAY/CONTACTOR. JUNCTION BOX SHALL BE NEMA #4X ENCLOSURE. BOTH MAU-1 AND EF-1 SHALL RUN TOGETHER. A ROOM THERMOSTAT SHALL CONTROL THE HEAT CYCLE ON
- 8. <u>E.C. SHALL VERIFY ALL INSTRUMENTATION LOCATIONS WITH THE</u> ENGINEER PRIOR TO INSTALLATION.
- E.C. SHALL VERIFY ALL EQUIPMENT LOCATIONS WITH THE ENGINEER PRIOR TO INSTALLATION.



ELECTRICAL FLOOR PLAN

SCALE: 1/2" = 1'-0"



- IMPROVEMENTS L FLOOR PLAN

WASTE WATER TREATMENT PLANT HEADWORKS BUILDING ELECTRICAL SECTION 30, T.30 N., R.7 W.

24024

E1.1